

Applicants: Kenneth A. Jones, et al.  
Serial No.: 09/471,572  
Filed: December 23, 1999  
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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listings of the Claims:**

Please amend the subject application as follows:

1-184. (Canceled)

184-190. (Canceled)

191. (New) An isolated nucleic acid encoding a chimeric G protein, wherein the chimeric G protein comprises a *Caenorhabditis elegans* Gαq G protein having the amino acid sequence set forth in SEQ ID NO: 1; provided that upon activation the chimeric G protein produces a Gαq second messenger response and wherein the Gαq second messenger response comprises release of intracellular calcium or calcium mobilization.

192. (New) An isolated nucleic acid encoding a chimeric G protein, wherein the chimeric G protein comprises a *Caenorhabditis elegans* Gαq G protein having the amino acid sequence set forth in SEQ ID NO: 2; provided that upon activation the chimeric G protein produces a Gαq second messenger response and wherein the Gαq second messenger response comprises release of intracellular calcium or calcium mobilization.

193. (New) An isolated nucleic acid encoding a chimeric G protein, wherein the chimeric G protein comprises a *Caenorhabditis elegans* Gαq G protein having the amino acid sequence set forth in SEQ ID NO: 3; provided that upon activation the chimeric G protein produces a Gαq second messenger response and

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wherein the Gαq second messenger response comprises release of intracellular calcium or calcium mobilization.

194. (New) An isolated nucleic acid encoding a chimeric G protein, wherein the chimeric G protein comprises a *Caenorhabditis elegans* Gαq G protein having the amino acid sequence set forth in SEQ ID NO: 4; provided that upon activation the chimeric G protein produces a Gαq second messenger response and wherein the Gαq second messenger response comprises release of intracellular calcium or calcium mobilization.
195. (New) An isolated nucleic acid encoding a chimeric G protein, wherein the chimeric G protein comprises a *Caenorhabditis elegans* Gαq G protein having the amino acid sequence set forth in SEQ ID NO: 5; provided that upon activation the chimeric G protein produces a Gαq second messenger response and wherein the Gαq second messenger response comprises release of intracellular calcium or calcium mobilization.
196. (New) An isolated nucleic acid encoding a chimeric G protein, wherein the chimeric G protein comprises a *Drosophila melanogaster* Gαq G protein having the amino acid sequence set forth in SEQ ID NO: 41; provided that upon activation the chimeric G protein produces a Gαq second messenger response and wherein the Gαq second messenger response comprises release of intracellular calcium or calcium mobilization.